

AMENDMENTS TO THE CLAIMS

1-6. (Canceled)

7. (Canceled)

8. (Currently Amended) The method of claim 78, wherein the actuator comprises a hydraulic ~~pump~~ press.

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Currently Amended) The method of claim 78, wherein the ~~delivery~~ hydraulic tube is flexible ~~and noncompliant~~.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Currently Amended) The method of claim 78, further comprising ~~a cannula~~ an injection needle connected to the exit port for delivery of the viscous material to the desired injection site in the patient.

21-35. (Canceled)

36. (Currently Amended) The method of claim 37, further comprising a separator sized to move within the inner bore of the tube while separating the viscous material from the incompressible fluid.

37. (Previously Presented) A method of delivering a viscous material under fluoroscopy to a site in a patient comprising the steps of:

a) providing a delivery tube containing an incompressible fluid and a viscous material, wherein the viscous material is located within the fluoroscopy field and the viscous material comprises bone cement; and

b) pressurizing the incompressible fluid outside the fluoroscopy field to exert pressure on the viscous material.

38. (Currently Amended) The method of claim 37 wherein the ~~delivery~~ hydraulic tube is flexible ~~and noncompliant~~.

39. (Previously Presented) The method of claim 37 wherein the step of pressurizing the incompressible fluid, comprises using a linear actuator.

40. (Previously Presented) The method of claim 37 further comprising the step of: a) determining the amount of viscous material delivered from a visualization window.

41-49. (Canceled)

50. (Previously Presented) A method according to claim 37, further comprising applying force amplification on the incompressible fluid.

51. (Previously Presented) A method according to claim 37, further comprising applying force amplification on the incompressible fluid by mechanical advantage.

52-58. (Canceled)

59. (Currently Amended) A method according to claim 37, comprising cooling said bone cement in a manner sufficient to delay its ~~solidification~~ hardening.

60. (Withdrawn) A method according to claim 37, further comprising replacing a cement chamber during a single medical procedure.

61. (Previously Presented) A method according to claim 37, further comprising delivering 10 cc of bone cement to a bone.

62. (Canceled)

63-77. (Canceled)

78. (Previously Presented) A method of delivering a viscous bone cement material under fluoroscopy to a site in a patient, comprising:

providing a delivery device having:

a container containing a viscous bone cement prior to the bone cement having set, the container having an exit port;

an actuator having an actuator vessel, the actuator vessel containing an incompressible fluid; and

a hydraulic coupling tube connecting the actuator vessel to the container;

locating the container with respect to the patient so that cement leaving the container through the exit port is delivered to a desired injection site within the patient; and

while at least a portion of the patient is subjected to fluoroscopic imaging, actuating the actuator from a location outside a field of fluoroscopic imaging to hydraulically drive a flow of viscous bone cement through the exit port to the desired injection site within the patient.